

Enabling Scientific and Technological Improvements to Meet Core Partner Service Requirements in Alaska - An Arctic Test Bed

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Test beds, such as the Joint Hurricane Test Bed (Miami, FL) and the Hazardous Weather Test Bed (Norman, OK) have been highly effective in meeting unique or pressing science and service challenges for the NWS. NWS Alaska Region leadership has developed plans for a significant enhancement to our operational capabilities in Alaska to address the emerging requirements of the Arctic: An Arctic Test Bed. Historically, the complexity of forecast operations and the inherent challenges in Alaska have not been addressed well by the R&D programs and projects that support the CONUS regions of the NWS. In addition, there are science and technology, and unique service challenges (e.g., sea ice forecasts) and opportunities (Bilateral agreements with Canada, Russia, and Norway) that would best be worked through Alaska operations. A dedicated test bed will provide a mechanism to transfer technology, research results, and observations advances into operations in a timely and effective manner. A NOAA Arctic Test Bed will provide a crucial nexus for ensuring NOAA's developers understand Alaska's needs, improve NOAA's responsiveness to its Arctic-related science and service priorities among the NWS and OAR (CPO and ESRL), and enable better leveraging of other research initiatives and data sources external to NOAA which are particular to the polar region (e.g., WWRP Polar Prediction Project).